

ABSTRACT

ONBOARD TERRAIN ANTICOLLISION DISPLAY DEVICE

Terrain anticollision equipment generally uses a display device showing a two-dimensional synthetic map of the terrain overflown by the aircraft and in which the relief is shown by superposed slices (S_1 , S_2 , S_3 , etc.) assigned false colors representative of the magnitude of the risk of collisions. The allocation of the false colors and/or the positions of the slices is referenced with respect to a reference display altitude ($RefAlt$) related to the instantaneous altitude of the aircraft ($a/c\ alt(t)$) or to a short term forecast altitude for the aircraft ($predicted\ a/c\ alt(t)$), each of the referencings having its own advantages as a function of the situation in progress for the aircraft. Here it is proposed that the reference display altitude be made to vary, with gentle transitions, with no visible jerks on the screen, as a function of the aircraft's situation deduced from the flight parameters so as to have, at any moment for the crew, the most pertinent possible and the most useful possible map having regard to the instantaneous situation vis à vis the risks of collision.

Fig. 3a